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10/579,703

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EXAMINER

KETEMA, BENYAM

ART UNIT

PAPER NUMBER

2629

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/579,703

**Applicant(s)**

JOON ET AL.

**Examiner**

BENYAM KETEMA

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8 and 10 is/are rejected.
- 7) ☒ Claim(s) 5 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/06)  
Paper No(s)/Mail Date 05/19/2006 and 08/08/2008
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-10 are presented for examination.

#### *Priority*

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. KR 10-2005-0011713, filed on 02/12/2005 and KR 10-2004-0078941, filed on 10/05/2004.

Gordon et al. (US Pat. No 6,677,929)

#### *Claim Rejections - 35 USC § 101*

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claim 6 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.** The preamble recites "a computer readable recording medium". Applicant's specification (page 13, Paragraph 1) defines the computer-readable medium to include other form of storage medium known in the art. Per *MPEP 2106.01*: "When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory."

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-4, 6-8 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al. (US Pat. No 6,677,929) in view of Shinz et al. (JP 409237157A).

**As in Claim 1**, Gordon et al. discloses *a method of inputting a character in a portable device* (Column 5 line 28-29 and Fig 2) *having*

- *a display screen*, (Column 10 line 11 and Fig 2 item 30) *comprising*:

- *a step of sensing the movement of an object which moves being in contact with an optical interface unit of the portable device;* (Column 7 line 51-67 and fig 3) discloses that the optical sensor senses the motion of the fingertip (digit 3) which is in contact with transparent dome shaped contact point where the detecting light source comes out.
- *a step of inputting a character by moving the pointer from the pointer start area according to the sensed movement;* (Column 11 line 37-55 and Fig 2 & 4) discloses the user can enter a graphical character by moving the pointer from its start position on the display.
- However Gordon et al. fails to disclose *a step of locating a pointer at a predetermined pointer start area on the display screen; a step of returning the pointer to the pointer start area according to the input of the character.*
- Shinz et al. discloses *a step of locating a pointer at a predetermined pointer start area on the display screen;* (Abstract) discloses the cursor having a predetermined position (i.e. practical position).
- Shinz et al. further discloses *a step of returning the pointer to the pointer start area according to the input of the character.* (Abstract) discloses the cursor having a predetermined position (i.e. practical position) where the cursor will return to its original position (i.e. practical position) when the operator moves his/her finger from the detecting unit.

Gordon et al. and Shinz et al. are analogous art because they are from the common area of cursor control input devices. It would have been obvious to one of ordinary skill

in the art at the time of the invention to combine Gordon's et al. cursor control with Shinz et al. predetermined cursor position system in order to make it easy to locate the cursor on screen, because Shinz et al. discloses that a cursor that has predetermined position (i.e. practical position) on the display device where the cursor will return to its original position (i.e. practical position) when the operator moves his/her finger from the detecting unit is useful in cursor control input device, Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the cursor controlled input device of Gordon et al. so that it can incorporate the capability of returning the cursor to its predetermined position as disclosed by Shinz et al. in order to prevent a cursor from being hidden or disappearing from view. The Shinz et al. feature of predetermined positioning of the cursor will enhance the cursor control of Gordon et al by making it easy to locate the cursor on the display screen.

**As in Claim 2**, Gordon et al. discloses *the method of claim 1*, as discussed above, but fails to disclose *the step of returning the pointer to the pointer start area according to the input of the character, the pointer is returned to the pointer start area in case that it is sensed that the object has ended the contact with the optical interface unit*, However, Shinz et al. (Abstract) discloses the cursor having a predetermined position (i.e. practical position) where the cursor will return to its original position (i.e. practical position) when the operator moves his/her finger from the detecting unit. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify cursor input device of Gordon et al. so that it can incorporate the capability of

returning the cursor to its predetermined position because Shinz et al. discloses that the cursor returns to its predetermined position when it is not in use.

**As in Claim 3**, Gordon et al. discloses *the step of inputting a character by moving the pointer from the pointer start area according to the sensed movement, the character is inputted in case that a character located at the area in which the pointer has moved is selected by a user.* (Column 11 line 37-55 and Fig 2 & 4) discloses the user can enter a graphical character by moving the pointer from its start position on the display to where the characters to be selected are. Hence its start position would be where the cursor is located on the display at the begging of the function (program).

**As in Claim 4**, Gordon et al. discloses *the method of claim 1, wherein: in the step of sensing the movement of an object which moves being in contact with an optical interface unit of the portable device (Column 4 line 41-53), the movement is sensed by measuring at least one of the speed and the distance of the movement of the object;* (Column 11 line 32-36) *and in the step of inputting a character by moving the pointer from the pointer start area according to the sensed movement,* (Column 11 line 37-55 and Fig 2 & 4 discloses the user can enter a graphical character by moving the pointer from its start position on the display to where the characters to be selected are. Hence its start position would be where the cursor is located on the display at the begging of the function (program)). *the pointer is moved in response to at least one of the measured speed and distance.* (Column 7 line 34- Column 8 line 19)

**As in Claim 6**, Gordon et al. discloses *a computer readable recording medium in which a program for executing a method of inputting a character (Abstract) in a portable device (Fig 2)*

- *having a display screen, (Fig 2 item 30) comprising:*
- *a step of sensing the movement of an object which moves being in contact with an optical interface unit of the portable device; (Column 7 line 51-67 and fig 3)*  
discloses that the optical sensor senses the motion of the fingertip (digit 3) which is in contact with transparent dome shaped contact point where the detecting light source comes out.
- *a step of inputting a character by moving the pointer from the pointer start area according to the sensed movement; (Column 11 line 37-55 and Fig 2 & 4)*  
discloses the user can enter a graphical character by moving the pointer from its start position on the display.
- *and a step of returning the pointer start area according to the input of the character. (Column 11 line 37-55 and fig 2 & 4)* since Gordon et al. discloses moving the cursor to input required character it would have been obvious to return the cursor to its starting position(i.e. where the cursor was located at the start of the application) .
- Gordon et al. fails to disclose *a step of locating a pointer at a predetermined pointer start area on the display screen; However, Shinz et al. (Abstract)*



discloses the cursor having a predetermined position (i.e. practical position) on the display screen.

Gordon et al. and Shinz et al. are analogous art because they are from the common area of cursor control input devices. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Gordon's et al. cursor control with Shinz et al. predetermined cursor position system in order to make it easy to locate the cursor on screen, because Shinz et al. discloses cursor that has predetermined position (i.e. practical position) on the display device where the cursor will return to its original position (i.e. practical position) when the operator moves his/her finger from the detecting unit. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify cursor controlled input device of Gordon et al. so that it can incorporate the capability of returning the cursor to its predetermined position as disclosed by Shinz et al. in order to prevent a cursor from being hidden or disappearing from view. Shinz et al. feature of predetermined positioning of cursor will enhance cursor control of Gordon et al by making it easy to locate the cursor on the display screen.

**As in Claim 7**, Gordon et al. discloses *a portable device (Fig 2) capable of inputting characters (Abstract), comprising:*

- *a display unit for displaying a predetermined character or a pointer on a predetermined display screen; (Column 10 line 11-15 and Fig 2 item 30 & 31)*

- *an optical interface unit contacting with a predetermined object, (Column 10 line 9 and Fig 3 )*
- *emitting an optical signal to the object, and receiving an optical reflection signal reflected from the object; (Column 11 line 14-18 and Fig 3)*
- *an optical signal sensing unit sensing the movement of the object by interpreting the received optical reflection signal and; (Column 7 line 64-67 and Fig 1 item 10 & 22) and (Column 11 line 12-14 and Fig 2 item 10)*
- *inputting a character by moving the pointer from the pointer start area according to the sensed movement, (Column 11 line 37-55 and Fig 2 & 4)*  
discloses the user can enter a graphical character by moving the pointer from its start position on the display.
- *and returning the pointer to the pointer start area according to the input of the character. (Column 11 line 37-55 and fig 2 & 4)* since Gordon et al. discloses moving the cursor to input required character it would have been obvious to return the cursor to its starting position(i.e. where the cursor was located at the start of the application) .
- Gordon et al. fails to disclose *a pointer control unit locating the pointer at a pointer start area on the display screen*, However, Shinz et al. (Abstract) discloses the cursor having a predetermined position (i.e. practical position) on the display screen.

Gordon et al. and Shinz et al. are analogous art because they are from the common area of cursor control input devices. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Gordon's et al. cursor control with Shinz et al. predetermined cursor position system in order to make it easy to locate the cursor on screen, because Shinz et al. discloses cursor that has predetermined position (i.e. practical position) on the display device where the cursor will return to its original position (i.e. practical position) when the operator moves his/her finger from the detecting unit. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify cursor controlled input device of Gordon et al. so that it can incorporate the capability of returning the cursor to its predetermined position as disclosed by Shinz et al. in order to prevent a cursor from being hidden or disappearing from view. Shinz et al. feature of predetermined positioning of cursor will enhance cursor control of Gordon et al by making it easy to locate the cursor on the display screen.

**As in Claim 8**, Gordon et al. discloses *the portable device* (Fig 2) as discussed above, but fails to disclose *the pointer control unit returns the pointer to the pointer start area in case that it is sensed that the object has ended the contact with the optical interface unit*. However, Shinz et al. (Abstract) discloses the cursor having a predetermined position (i.e. practical position) where the cursor will return to its original position (i.e. practical position) when the operator moves his/her finger from the detecting unit. It would have been obvious to one of ordinary skill in the art at the

time of the invention to combine Gordon's et al. cursor control with Shinz et al. predetermined cursor position system in order to make it easy to locate the cursor on screen, because Shinz et al. discloses cursor that has predetermined position (i.e. practical position) on the display device where the cursor will return to its original position (i.e. practical position) when the operator moves his/her finger from the detecting unit.

**As in Claim 10**, Gordon et al. discloses *the portable device (Fig 2) of claim 7, wherein the optical interface unit comprises a predetermined object surface to which the optical signal is transmitted, a lens, and an image surface, the object surface, the lens, and the image surface are horizontally disposed.* (Column 10 line 52-66 and Fig 3)

***Allowable Subject Matter***

8. Claims 5 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: Prior art of the record particularly fails to teach or fairly suggest that step of inputting a character by moving the pointer according to the sensed movement.

### **Prior Art**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No 5,841,849 discloses a portable display device using pointer in the display screen to input command onto said device by means of manipulatable member such as trackball, joystick. Robertson et al. (US Patent No 5,598,183) discloses system attempts to locate a user selectable option and repositions the cursor at the user selectable option. When the new window is closed, the system returns the cursor to the position it was at before the new window was opened.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENYAM KETEMA whose telephone number is (571)270-7224. The examiner can normally be reached on Monday- Friday 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shalwala Bipin H can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ B.K. /

Examiner, Art Unit 2629

/Bipin Shalwala/

Supervisory Patent Examiner, Art Unit 2629